

AMENDMENT to the CLAIMS

1. (currently amended) A computer-implemented method for converting a multilingual unidirectional domain name to a multilingual bidirectional domain name, said method comprising ~~the steps of:~~
receiving into a computer memory device a multilingual unidirectional World Wide Web address, said unidirectional World Wide Web address comprising a Uniform Resource Locator or a domain name and comprising characters from at least two character sets having at least two different display orders;
breaking by a computer establishing a plurality of labels within a said unidirectional World Wide Web address domain name into a plurality of labels delimited by by using a pre-determined full stop punctuation mark as a delimiter between said labels, said labels having an original label display order as encountered from left to right, said labels containing a plurality of characters wherein each character has a determinate display order or an indeterminate display order, said full stop punctuation mark excluding a hyphen-minus character;
within at least one of said plurality of labels each said label, performing inferencing through resolving display directions the direction of indeterminate display order characters by assigning a strong direction left-to-right display order left or right to each indeterminate display order character; [[and]]
subsequent to said resolving, converting said multilingual unidirectional World Wide Web address to a multilingual bidirectional World Wide Web address by reordering by a computer said characters within each said label of said unidirectional domain name into a character display order using the fully resolved characters previously inferred thereby converting said uni-directional domain name to a bidirectional domain name in which wherein said original label display order is preserved[[,]] and bidirectionality of characters within each label is produced[[.]] ; and
displaying said multilingual bidirectional World Wide Web address on a computer display.

2. (currently amended) The method as set forth in Claim 1 wherein said ~~step of~~ inferencing comprises ~~the steps of~~:

first, assigning a right-to-left direction to Arabic and Hebrew letters;
second, assigning a left-to-right direction to full stop characters and other alphabetic characters;
third, resolving the directions of digits; and
fourth, resolving the directions of hyphen-minus characters.

3. (currently amended) The method as set forth in Claim 2 wherein said ~~step of~~ resolving [[the]] directions of digits comprises ~~the steps of~~:

assigning a right-to-left direction to [[all]] Arabic numerals; and
assigning a left-to-right direction to [[all]] European numerals, unless a European numeral is surrounded by right-to-left characters such as Arabic or Hebrew letters, in which case ~~it is assigned~~ assigning a right-to-left direction.

4. (currently amended) The method as set forth in Claim 2 wherein said ~~step of~~ resolving [[the]] directions of hyphen-minus characters comprises:

assigning a left-to-right direction to all hyphen-minus characters which are not surrounded by characters whose direction is right-to-left; and
assigning a right-to-left direction to all hyphen-minus characters which are surrounded by characters whose direction is right-to-left.

5. (currently amended) A computer readable memory comprising medium encoded with computer executable software for converting a unidirectional domain name to a bidirectional domain name, said software when executed causing a computer to perform the steps of: a computer memory device suitable for encoding computer programs; and one or more computer programs encoded by said computer memory device, said computer program:
receiving into a computer memory device a multilingual unidirectional World Wide Web address, said unidirectional World Wide Web address comprising a Uniform Resource Locator or a domain name and comprising characters from at least two character sets having at least two different display orders;
breaking by a computer said unidirectional World Wide Web address into a plurality of labels delimited by pre-determined full stop punctuation mark between said labels, said labels having an original label display order as encountered from left to right, said labels containing a plurality of characters wherein each character has a determinate display order or an indeterminate display order, said full stop punctuation mark excluding a hyphen-minus character;
within at least one of said plurality of labels, performing inferencing through resolving display directions of indeterminate display order characters by assigning a strong direction left-to-right display order to each indeterminate display order character;
subsequent to said resolving, converting said multilingual unidirectional World Wide Web address to a multilingual bidirectional World Wide Web address by reordering by a computer said characters within each said label into a display order using the fully resolved characters previously inferred wherein said original label display order is preserved and bidirectionality of characters within each label is produced; and
displaying said multilingual bidirectional World Wide Web address on a computer display.
establishing a plurality of labels within a unidirectional domain name by using a pre-determined full stop punctuation mark as a delimiter between said labels, said labels having an original label display order as encountered from left to right;

within each said label, performing inferencing through resolving the direction of indeterminate characters by assigning a strong direction left or right to each indeterminate character, and

reordering said characters within each said label of said unidirectional domain name into character display order using the fully resolved characters previously inferred, thereby converting said uni-directional domain name to a bidirectional domain name in which said original label display order is preserved, and bidirectionality of characters within each label is produced.

6. (currently amended) The computer readable medium memory as set forth in Claim 5 wherein said software for inferencing comprises software for performing the steps of:

first, assigning a right-to-left direction to Arabic and Hebrew letters;
second, assigning a left-to-right direction to full stop characters and other alphabetic characters;
third, resolving the directions of digits; and
fourth, resolving the directions of hyphen-minus characters.

7. (currently amended) The computer readable medium memory as set forth in Claim 6 wherein said software for resolving [[the]] directions of digits comprises software for performing the steps of:

assigning a right-to-left direction to [[all]] Arabic numerals; and
assigning a left-to-right direction to [[all]] European numerals, unless a European numeral is surrounded by right-to-left characters such as Arabic or Hebrew letters, in which case it is assigned assigning a right-to-left direction.

8. (currently amended) The computer readable ~~medium~~ memory as set forth in Claim 6 wherein said ~~software for~~ resolving [[the]] directions of hyphen-minus characters comprises ~~software for~~ performing the steps of:

assigning a left-to-right direction to all hyphen-minus characters which are not surrounded by characters whose direction is right-to-left; and
assigning a right-to-left direction to all hyphen-minus characters which are surrounded by characters whose direction is right-to-left.

9. (currently amended) A system which converts for converting a unidirectional domain name to a bidirectional domain name comprising:

an input portion of a computing platform receiving into a computer memory device a multilingual unidirectional World Wide Web address, said unidirectional World Wide Web address comprising a Uniform Resource Locator or a domain name and comprising characters from at least two character sets having at least two different display orders;

a label definer portion of a computer platform breaking said unidirectional World Wide Web address into a plurality of labels delimited by pre-determined full stop punctuation mark between said labels, said labels having an original label display order as encountered from left to right, said labels containing a plurality of characters wherein each character has a determinate display order or an indeterminate display order, said full stop punctuation mark excluding a hyphen-minus character adapted to establish a plurality of labels within a unidirectional domain name by using a pre-determined full stop punctuation mark as a delimiter between said labels, said labels having an original label display order as encountered from left to right;

an inferencer portion of a computing platform performing within at least one of said plurality of labels inferencing through resolving display directions of indeterminate display order characters by assigning a strong direction left-to-right display order to each indeterminate display order character adapted to, within each said label, resolve the direction of indeterminate characters by assigning a strong direction left or right to each indeterminate character; [[and]]

a character reorderer portion of a computing platform converting subsequent to said resolving said multilingual unidirectional World Wide Web address to a multilingual bidirectional World Wide Web address by reordering by a computer said characters within each said label into a display order using the fully resolved characters previously inferred wherein said original label display order is preserved and bidirectionality of characters within each label is produced; and

adapted to reorder said characters within each said label of said unidirectional domain name into character display order using the fully resolved characters previously inferred, thereby converting said uni-directional domain name to a bidirectional domain name in which said original label display order is preserved, and bidirectionality of characters within each label is produced.

a user display portion of said computing platform displaying said multilingual bidirectional World Wide Web address on a computer display.

10. (currently amended) The system as set forth in Claim 9 wherein said inferencer comprises:
 - a first direction assignor [[for]] assigning a right-to-left direction to Arabic and Hebrew letters;
 - a second direction assignor [[for]] assigning a left-to-right direction to full stop characters and other alphabetic characters;
 - a third direction assignor [[for]] resolving the directions of digits; and
 - a fourth direction assignor for resolving the directions of hyphen-minus characters.

11. (currently amended) The system as set forth in Claim 10 wherein said third direction assignor comprises:

a right-to-left direction assignor [[for]] operative on [[all]] Arabic numerals, and for all European numerals which are surrounded by right-to-left characters such as Arabic and Hebrew letters; and

a left-to-right direction assignor [[for]] operative on [[all]] European numerals which are not surrounded by right-to-left characters such as Arabic or Hebrew letters.

12. (currently amended) The system as set forth in Claim 10 wherein said fourth direction assignor comprises:

a left-to-right direction assignor for [[all]] hyphen-minus characters which are not surrounded by characters whose direction is right-to-left; and

a right-to-left direction assignor for [[all]] hyphen-minus characters which are surrounded by characters whose direction is right-to-left.

13. (previously presented) The method as set forth in Claim 1 wherein said pre-determined full stop punctuation mark used as a delimiter between said labels comprises a Latin period punctuation mark.

14. (currently amended) The computer-readable ~~medium~~ memory as set forth in Claim 5 wherein said pre-determined full stop punctuation mark used as a delimiter between said labels comprises a Latin period punctuation mark.

15. (previously presented) The system as set forth in Claim 9 wherein said pre-determined full stop punctuation mark used as a delimiter between said labels comprises a Latin period punctuation mark.